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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,988	02/02/2001	Gregory C. Weed	IM0877 US CIP	7278

23906 7590 09/09/2003

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 09/09/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,988

Applicant(s)

WEED ET AL.

Examiner

Cynthia Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 3, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 6-9 is/are objected to.
- 8) ☒ Claim(s) 1-9 and 11 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The request for a continued prosecution application (CPA) under 37 CFR 1.53(d) filed on December 17, 2002 is acknowledged. 37 CFR 1.53(d)(1) was amended to provide that the prior application of a CPA must be: (1) a utility or plant application that was filed under 35 U.S.C. 111(a) before May 29, 2000, (2) a design application, or (3) the national stage of an international application that was filed under 35 U.S.C. 363 before May 29, 2000. *See Changes to Application Examination and Provisional Application Practice*, interim rule, 65 Fed. Reg. 14865, 14872 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47, 52 (Apr. 11, 2000). Since a CPA of this application is not permitted under 37 CFR 1.53(d)(1), the improper request for a CPA is being treated as a request for continued examination of this application under 37 CFR 1.114. *See id.* at 14866, 1233 Off. Gaz. Pat. Office at 48. This application was not under final rejection when the CPA was filed but the Decision on applicant's Petition filed January 31, 2002 which was mailed February 4, 2003 to applicants, was held sufficient to restore this application to pending status, this application is treated as having proper status for continued examination under 37 CFR 1.53 (d) (1). The examiner notes for the record the June 18, 2002 Office Action stated by the Senior Petitions Examiner as "the final Office action of June 18, 2002" was not a Final Action as defined by , but was instead the first action on the merits in this application. However, it was the final action before abandonment. This application is held to be in pending status because of the PTO decision on applicant's petition set forth on February 4, 2003 so stating and the concomitant requirement that the examiner treat the requisite submission of January 31, 2003.

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2. The examiner notes that in the Amendment filed January 1, 2003 applicants state claims 3 and 4 are dependent. The examiner notes this is in error. Claims 3 and 4 as submitted are independent claims and are broader in scope than the original claims 3 and 4 in that there is no limit with respect to borate presence in either claim.

3. The examiner also notes with regards to amended claims 3 and 4 the following:

In claim 3, the counterion L^{\ominus} is not limited in its content in any manner. In claim 4, there is either (a) a need for a counterion when looking at D_2 but there is no L^{\ominus} present or defined or (b) whenever there is a need for a counterion, A must be an enolate. Wherein A is an enolate as in the first two structures of A in claim 4 a non intra-molecular anion would not be needed to finish defining the dye set forth, but where there is no enolate anion as in the last 4 structures given in claim 4 for A, a worker of ordinary skill in the art would assume such a non intra-molecular anion is present even if not addressed in the claim limits. There is no limit on this tacit counterion that must be present with the near infrared dye photochemical sensitizer of claim 4, thus it, too can be a borate ion. Thus, claim 4 is as claim 3 broader than the original claims set forth in this application. All of the original claims were limited to a photosensitizer that was "essentially free of borate anion" with the confusion being brought about with the inclusion of DF-12124 and GW-186 in claims 5 and 7 (which was and is dependent upon claim 3) which clearly had borate anions present. This confusion as to what is meant by photosensitizer that was "essentially free of borate anion" with the confusion being brought about with the inclusion of DF-12124 and GW-186 has been removed by applicants' amendments of February 3, 2003. However, in removing the confusion applicants have clearly broadened the scope of the

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invention with respect to the presence of borate anion beyond that of the originally presented claims.

4. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

This application is claiming the benefit of a prior filed nonprovisional application under 35 U.S.C. 120, 121, or 365(c). Copendency between the current application and the prior application is required.

Applicants have claimed in lines 5-8, "This is a continuation-in-part of U.S. Patent Application No. 08/708,476, filed September 5, 1996 (abandoned), and of copending U.S. Patent Application No. 08/888242, filed July 3, 1997, which is incorporated herein by reference in its entirety. " The problem is that this application was filed February 2, 2001 and SN 08/708,476 was abandoned on September 12, 1997. Thus, this application cannot be a continuation-in-part of U.S. Patent Application No. 08/708,476 without an intervening application that was dependent upon U.S. Patent Application No. 08/708,476. The application that would fit that requirement is U.S. Patent Application No. 08/888242 which claimed continuation-in-part status with respect to U.S. Patent Application No. 08/708,476. However, applicants have not claimed this status, instead they have claimed continuation-in-part status to each previous application independent of the other. Because of this, there is no valid claim to an effective filing date of September 5, 1996 because applicants have failed to meet the requirements of 35 USC 120 with respect to codependency with respect to U.S. Patent Application No. 08/708,476. The examiner suggests applicants rewrite their lines 5-8 to read "This is a continuation-in-part of U.S. Patent Application No. 08/888,242, filed July 3, 1997, now abandoned, which is incorporated herein by

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reference in its entirety, which is a continuation-in-part of U.S. Patent Application No. 08/708,476, filed September 5, 1996 (abandoned)." See particularly MPEP 201.11, III, (C):

"Sometimes a pending application is one of a series of applications wherein the pending application is not copending with the first filed application but is copending with an intermediate application entitled to the benefit of the filing date of the first application. If applicant wishes that the pending application have the benefit of the filing date of the first filed application, applicant must, besides making reference to the inter-mediate application, also make reference to the first application. See Sticker Indus. Supply Corp. v. Blaw-Knox Co., 405 F.2d 90, 160 USPQ 177 (7th Cir. 1968) and Hovlid v. Asari, 305 F. 2d 747, 134 USPQ 162 (9th Cir. 1962). The reference to the prior applications must identify all of the prior applications and indicate the relationship (i.e., continuation, divisional, or continuation-in-part) between each nonprovisional application in order to establish copendency through-out the entire chain of prior applications. IF an applicant desires, for example, the following benefit claim: "this application is a continuation of Application No. C, filed ---, which is a continuation of Application No. B, filed ---, which claims the benefit of provisional Application No. A, filed ---," then Application No. C must have a reference to Application No. B and provisional Application No. A, and Application No. B must have a reference to provisional Application No. A."

At present, the earliest possible effective filing date for any of the claims in this application is July 3, 1997 with respect to U.S. Patent Application No. 08/888,242, filed July 3, 1997.

5. Claims 3, 8/3 and 9/3 are rejected under 35 U.S.C. 102(a and b) as being anticipated by Showa Denko KK (JP 8-297364) and the accompanying English Translation of this reference (PTO 99-3373). An English translation of JP 8-297364 has been obtained. All reference to pages is in reference to this translation. On page 2 under [Constitution] the instant invention of claims 3, 8/3 and 9/3 are disclosed with respect to one species with the exception that the hindered phenol compound or hindered amine compound is not called a chain transfer agent but they are inherently such agents. Table on page 24, No. 8 is an IR dye that specific to the dyes in the instant claims. The choice of photopolymerizing compound, binder and biimidazole compound is set on page 2 each must be present. Thus, the choice of one of nine IR dyes

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specifically given is held anticipatory of the instant composition. The examples 1-3 starting on page 39 are also held anticipatory of the instant compositions. The instant A is that of (4) N,N-bisaryl wherein the aryl group is an unsubstituted phenyl group, D1 is a heterocyclic ring system having at least one NR₃ group bonded directly to an aryl ring of the heteroaryl ring system with R₃ being an ethyl group, ie C₂ alkyl group unsubstituted, and D2 is a system identical as that set forth in DF-15131 wherein the anion is a discrete borate anion. The examiner makes clear that a biimidazole compound must be present, one of a hindered phenol or hindered amine must be present and photopolymerizing compound must be present in the compositions of Showa Denko KK. The choice of one of nine IR dyes is seen as so small a number as the choice of any one of the eight is anticipatory. It is the only choice to be made. This species anticipates the generic claims 3, 8/3 and 9/3 wherein component (C) is present as in the elected species.

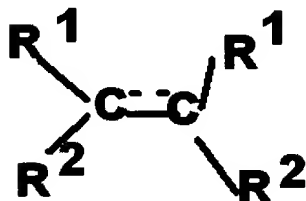
6. Applicant's arguments filed January 1, 2003 have been fully considered but they are not persuasive. Applicants argue Showa Denko reference does not qualify as 35 USC 102 (b) prior art because "The Showa Denko reference does not qualify as 102(b) prior art because the November 12, 1996 publication date is less than one year prior to the earliest effective filing date of the instant application, to the extent that there is continuity of the relevant disclosure of the instant application as compared to the disclosures of the earlier applications." The examiner has already explained above in paragraph 4 why the oldest effective filing date obtainable in the current application is July 3, 1997 because applicants failed to claim intervening status of a copending application with U.S. Patent Application No. 08/708,476. Thus, the examiner has entered rejections over this reference in regard to 102 (a) as well as (b). However, she believes rejections under 102 (b) are still valid. The claims as now presented are rejected under 102 (a).

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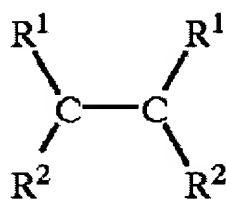
The examiner believes no such rejection under 102 (b) was required with respect to the original claims. With respect to instant claims 3, 8/3 and 9/3 and granting an earlier effective filing date of July 3, 1997 in order to remove rejections under 35 USC 102(b) with respect to Showa Denka or even November 12, 1996 in order to remove Showa Denka as prior art all together if applicants were to perfect their claim under 35 USC 120 with respect to continuity to U.S. Patent Application No. 08/708,476, the issue which remains is whether claims 3, 8/3 and 9/3 under 35 U.S.C. 120 are entitled to the benefit of the filing date of an earlier filed U.S. application because the subject matter of the claim is disclosed in the manner provided by 35 U.S.C. 112, first paragraph, in the earlier filed application. See, e.g., *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 47 USPQ2d 1829 (Fed. Cir. 1998); *In re Scheiber*, 587 F.2d 59, 199 USPQ 782 (CCPA 1978) and MPEP 201.11. Any claim in a continuation-in-part application which is directed *solely* to subject matter adequately disclosed under 35 U.S.C. 112 in the parent nonprovisional application is entitled to the benefit of the filing date of the parent nonprovisional application. However, if a claim in a continuation-in-part application recites a feature which was not disclosed or adequately supported by a proper disclosure under 35 U.S.C. 112 in the parent nonprovisional application, but which was first introduced or adequately supported in the continuation-in-part application such a claim is entitled only to the filing date of the continuation-in-part application; *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995); *Transco Products, Inc. v. Performance Contracting Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994); *In re Von Lagenhoven*, 458 F.2d 132, 136, 173 USPQ 426, 429 (CCPA 1972); and *Chromalloy American Corp. v. Alloy Surfaces Co., Inc.*, 339 F. Supp. 859, 874, 173 USPQ 295, 306 (D. Del. 1972).

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With respect to instant claims 3, 8/3 and 9/3, the changing of the choice for Y in instant claim 3



as found in the original disclosure of 08/888,242 to



in this application as originally submitted is unsupported by US application 08/888,242. Applicants tried to make this change in the parent application but did not make the change in the claim language. The structure as now given by applicants only makes sense if the unshown valences off of the carbon atoms are that which makes Y attached to the rest of the ring. There is no clear support for such a structure in the original disclosure of either US Patent Application No. 08/888,242 or U.S. Patent Application No. 08/708,476. The only example that comes near the original structure is that of DF-1419 wherein a - C (H) =C (H)- structure is found for Y. Thus, an issue of clarity in US Patent Application No. 08/888,242 was left unresolved. Applicants changes in the instant application removed the issued of clarity with regard to what Y was but added to the disclosure clarity not present in the original disclosure. The examiner notes that DF-1419 made no sense in view of the original structure for Y here unless one of each R1 and R2 was removed. In the instant application, it is clear what is meant

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by the structure without the dotted line if the structure is to be part of the compound. However, empty bonds would yield a clearer structure. Thus, because this lack of clarity with regard to this one part of claims 3, 8/3 and 9/3 is present, all of claims 3, 8/3 and 9/3 are not entitled to the earlier effective filing date of July 3, 1997 and Showa Denko is properly applied under 35 USC 102 (b).

In the alternative applicants argued that because in claims 3 and 4, R⁶ is limited to hydrogen, methoxy or trifluoromethane, then Showa Dinko which requires that R⁶ be chlorine does not read on instant claims 3 and 4. Applicants are correct with respect to instant claim 4 but not with respect to instant claim 3. "R⁴-R⁷ are independently chosen from H, OCH₃, CF₃, halogen" in claim 3. Applicants have not amended claim 3 to remove halogen and chlorine is a halogen. Thus, with respect to instant claims 3, 8/3 and 9/3, Showa Dinko is properly applied.

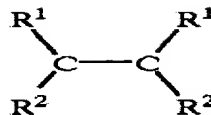
7. The examiner notes that because applicants incorporated US Patent Application No. 08/888,242 in its entirety into the instant application then there is sufficient support for claims 3 and 4 as they are now written encompassing all borate counterions as well as nonborate counterions.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In claim 7 is found DF -1419 which requires that Y in claim 3 be

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-C(H)=C(H)- which does not fit within the limits of as required in
claim 3 upon which claim 7 depends.

10. Claim 9/2 and 9/4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 9 limits claims 2 and 4 to the presence of a binder polymer but claims 2 and 4 are already limited to having a binder polymer present. Thus, claim 9 does not further limit claims 2 and 4 in anyway.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 is confusing because the last lines find the photoimageable dye alternatively present, i.e. "or the photoimageable dye is present..." but it follows a list of "and" components. Is this "or" in alternative to all the components above or is it meant to be in alternative of only the chain transfer agent immediately preceding it or is the alternative more logically to the both the photopolymerizable material and the chain transfer material as claim 1 sets forth as (c) and cites (d) the photoimageable dye as an alternative thereof?

13. Claims 8/2 and 8/4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. Claim 8/2 recites the limitation "photoimageable dye" in last two lines. There is insufficient antecedent basis for this limitation in claim 2.

14. Newly submitted claim 11 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

- a. Inventions I (claims 1-9) classified in Class 430, subclass 281.1 and Invention II (claim 11) classified in Class 430, subclass 269 are related as product and process of use.

The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be cured by uv light that activated the biimidazole compound without changing the photosensitizer.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 11 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. The examiner notes that because claim 3 is not allowed rejoinder of this process claim to the allowed claims 1-2 and 4 is premature.

15. The examiner has examined all species of claims 1-9 thus the election of species required in the Office Action of February 22, 2002 with respect to these claims is withdrawn.

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16. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

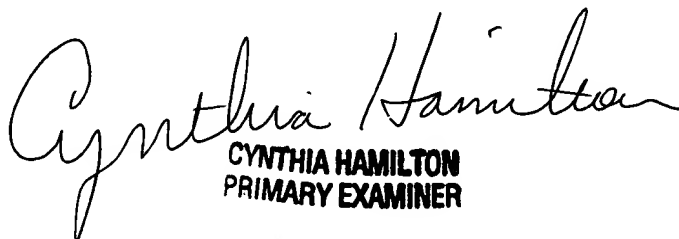
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the 1700 receptionist whose telephone number is (703) 308-0661.

Cynthia Hamilton
September 7, 2003


CYNTHIA HAMILTON
PRIMARY EXAMINER